

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An inter-router adjustment method, the method comprising:

requesting router status information of router devices belonging to a common sub-network, the router devices connected to external networks, respectively, the external networks being different from each other;

acquiring the router status information and calculating priorities to decide whether ~~at the~~ respective router device is to have an operational status in which the respective router device ~~of the router devices belonging to the common sub-network~~ is placed in operation based on the router status information, ~~the router status information including at least line status information indicating a status of a respective physical link of the external networks to the respective router device~~ so that the router devices belonging to the common sub-network operate as one virtual router device; ~~and device;~~

deciding a first router device belonging to the common sub-network that is operational and ~~a second one or more other router devices of the router devices belonging to the common sub-network~~ to be placed in a standby status, according to the calculated priorities; ~~and~~

~~notifying the plurality of router devices belonging to the common sub-network that the first router device is operational.~~

2. (Currently Amended) An inter-router adjustment method, comprising:

an information request step of requesting router status information of router devices belonging to a common sub-network, the router devices being connected to external networks respectively, the external networks being different from each other;

a step of acquiring the router status information and calculating priorities for deciding a respective router device of the router devices belonging to the common sub-network that is to become operational based on the router status information including at least line status information indicating the status of a respective physical link of the external networks to the respective router device so that a plurality of router devices of the common sub-network operate virtually as one router device;

a step of transmitting the priorities calculated for each of the router devices of the common sub-network between or among the router devices of the common sub-network; and

a step of deciding a first router device belonging to the common sub-network that is operational and one or more other router devices of the router devices belonging to the common sub-network to be placed in a standby status, according to the calculated priorities; and for a first router device which received the calculated priorities to decide whether or not to become operational, depending upon a calculated priority of the first router and a calculated priority of a second router device received from the second router device which is operational

notifying the plurality of router devices belonging to the common sub-network that the first router device is operational.

3. (Previously Presented) An inter-router adjustment method according to claim 1, further including a step of adjusting the priorities between or among the router devices depending upon a significance of the router status information.

4. (Previously Presented) An inter-router adjustment method according to claim 1, wherein a request for the router status information is periodically made based on the information request step.

5. (Previously Presented) An inter-router adjustment method according to claim 1, wherein a request for the router status information is made according to a request from a communication device including the router devices connected to the common sub-network.

6. (Previously Presented) An inter-router adjustment method according to claim 1, wherein the calculating of the priorities is made when there is a change in the router status information acquired.

7. (Previously Presented) An inter-router adjustment method according to claim 1, wherein the router status information further includes at least one of a processing burden or a remaining battery capacity of the respective router device.

8. (Currently Amended) A router priority calculation device, comprising:

a router information gathering section for gathering router status information of router devices belonging to a common sub-network, the router devices being connected to external networks, respectively, the external networks being different from each other;

a priority calculating section for calculating priorities to decide whether a respective router device of the router devices belonging to the common sub-network that is to become have an operational status based on the router status information including at least line status information indicating the status of a respective physical link of the external networks to the respective router device so that a plurality of router devices of the common sub-network operate virtually as one router device; and

a decision section for deciding a first router device belonging to the common sub-network that is to become operational and one or more other router devices of the router devices belonging to the common sub-network to be placed in a standby status, according to the calculated priorities; and

a priority notifying section for notifying the priorities calculated for the router devices respectively to the plurality of router devices of belonging to the common sub-network that the first router device is operational.

9. (Currently Amended) A router priority calculation device comprising:

a router information gathering section for gathering router status information including at least a link status value indicating a status of a physical link of each router device to one of external networks and a remaining capacity value indicating a

~~remaining battery capacity of each router device~~ of the router devices belonging to a common sub-network, the router devices being connected to the external networks, respectively, the external networks being different from each other;

a priority calculating section for calculating a priority for each router device belonging to the common sub-network to decide whether a respective router device of the router devices belonging to the common sub-network is to become operational using the router status information link status value and the remaining capacity value such that the calculated priority for each router device belonging to the common sub-network is based on a weighting of at least the link status value and the remaining capacity value associated with a respective router device so that a plurality of router devices of the common sub-network operate virtually as one router device;

a master deciding section for deciding a first router device of the router devices belonging to the common sub-network that is to become operational and one or more other a second router devices of the router devices belonging to the common sub-network that is to be placed in a standby status, according to the calculated priorities; and

a master notifying section for notifying the plurality of router devices belonging to the common sub-network that the first router device is operational and that the one or more other routers are to be placed in the standby status information identifying the decided first and second router devices thereto.

10. (Previously Presented) A router priority calculation device according to claim 8, wherein the router information gathering section has a comparing section for comparing the router status information newly acquired with existing router status information, to instruct the priority calculating section to re-calculate a priority when the comparing section detects a difference in the router status information.

11. (Currently Amended) A router priority calculation device according to claim 8, wherein the router information gathering section has an information request section for requesting the router status information to the respective router device.

12. (Original) A router priority calculation device according to claim 11, wherein the router information gathering section has a timer, the information request

section requesting the router status information when receiving a time-up notification from the timer.

13. (Currently Amended) A router priority calculation device according to claim 11, wherein the router information gathering section further includes an update request receiving section for receiving an update request for the priority from a communication device including the router devices connected to the common sub-network,

the update request receiving section, when receiving the update request, making a notification to the information request section whereby the information request section requests the router status information to the respective router device.

14. (Previously Presented) A router priority calculation device according to claim 8, wherein the router status information further includes at least one of a processing burden or a remaining battery capacity of the respective router device.

15. (Currently Amended) A router device configured to operate with at least one other router device, as a plurality of router devices that belong to a common sub-network, the router device comprising:

a status notifying section for forwarding router status information ~~comprising at least one of a line status indicating the status of a respective physical link to the router device or a remaining battery capacity indicating a remaining battery capacity of the router device~~, the router device and the one other router device being connected to external networks, respectively, the external networks being different from each other;

a priority-receiving section for receiving a priority notification that for deciding whether the router device is to become operational and that the at least one other router device belonging to the common sub-network is to be placed in a standby status so that the plurality of router devices that belong to the common sub-network operate virtually as one router device; and

a master-deciding-section for deciding whether causing the router device is to become operational or to be placed in a standby status, according to the priority notification received from a first router device which is operational.

16. (Previously Presented) A router device according to claim 15, wherein the status notifying section forwards periodically the router status information onto the common sub-network.

17. (Previously Presented) A router device according to claim 15, further including an information request receiving section for receiving a request for the router status information, to forward the router status information onto the common sub-network depending upon the request the status notifying section received.

18. (Currently Amended) A router device according to claim 15, further including a status monitor section for monitoring a change in the router status information, the status monitor section, when detecting a change in the router status information, making a notification to the information notifying section whereby the information status notifying section forwards a latest router status information onto the common sub-network.

19. (Currently Amended) A local network system, comprising:

a plurality of router devices, each of the plurality of router devices including:

a status notifying section for forwarding router status information comprising at least one of a line status indicating the status of a respective physical link of external networks to the respective router device or a remaining battery capacity of the respective router device, the plurality of router devices being connected to the external networks, respectively, the external networks being different from each other,

a priority-receiving section for receiving a notification that priority for deciding whether the respective router device of the plurality of router devices is to become operational so that a plurality of the router devices that belong to a common sub-network operate virtually as one router device, and

a master deciding section for causing the respective router device to be operational deciding whether the router device is to become operational or to be placed in a standby status, according to the notification priority received and a priority notified from a first router device which is operational; and

a router priority calculation device that includes:

a router information gathering section for gathering router status information of the router devices belonging to the common sub-network,

a priority calculating section for calculating priorities for deciding—a deciding whether the respective router device that of the plurality of router devices is to become have an operational status based on the router status information so that a plurality of the router devices belonging to the common sub-network operate virtually as one router device, and

a decision section for deciding a first router device belonging to the common sub-network that is to become operational and one or more other router devices of the plurality of router devices to be placed in a standby status, according to the calculated priorities; and

a priority notifying section for notifying the plurality of router devices that the first router device is operational the priorities calculated for each router device belonging to the common sub-network respectively thereto.

20. (Previously Presented) An inter-router adjustment method according to claim 2, further including a step of adjusting the priorities between the router devices depending upon a significance of the router status information.

21. (Previously Presented) An inter-router adjustment method according to claim 2, wherein a request for the router status information is periodically made based on the information request step.

22. (Previously Presented) An inter-router adjustment method according to claim 2, wherein a request for the router status information is made according to a

request from a communication device including the router devices connected to the common sub-network.

23. (Previously Presented) An inter-router adjustment method according to claim 2, wherein the calculating of the priorities is made when there is a change in the router status information acquired.

24. (Previously Presented) An inter-router adjustment method according to claim 2, wherein the router status information further includes at least one of a processing burden or a remaining battery capacity of the router device.

25. (Previously Presented) A router priority calculation device according to claim 9, wherein the router information gathering section has a comparing section for comparing the router status information newly acquired with existing router status information, to instruct the priority calculating section to re-calculate a priority when the comparing section detects a difference in the router status information.

26. (Currently Amended) A router priority calculation device according to claim 9, wherein the router information gathering section has an information request section for requesting the router status information to the respective router device.

27. (Previously Presented) A router priority calculation device according to claim 26, wherein the router information gathering section has a timer, the information request section requesting the router status information when receiving a time-up notification from the timer.

28. (Currently Amended) A router priority calculation device according to claim 26, wherein the router information gathering section further includes an update request receiving section for receiving an update request for the priority from a communication device including the router devices connected to the common sub-network,

the update request receiving section, when receiving the update request, making a notification to the information request section whereby the information request section requests the router status information to the respective router device.

29. (Currently Amended) A router priority calculation device according to claim 9, wherein the router status information further includes at least one of a processing burden or remaining battery capacity of the respective router device.

30. (Currently Amended) The method according to claim 1, wherein the router line status information further includes battery capacity information that indicates a remaining battery capacity of the respective router device such that the calculated priorities are based on the-line status information and the remaining battery capacity of the respective router device.

31. (Currently Amended) The method according to claim 1, wherein the router status information includes line status information that indicates at least one of: (i) a transmission speed of the physical link, (ii) an error condition for the physical link, or (iii) a degree of congestion on the physical link, the physical link being different from any router device.

32. (New) An inter-router adjustment method for adjusting a master router and a backup router on a common sub-network including a plurality of router devices, the method comprising:

requesting, by a router device of the plurality of router devices from each remaining router device of the plurality of router devices, router status information of router devices belonging to the common sub-network, the router devices connected to external networks, respectively, the external networks being different from each other;

acquiring, by the control device, the router status information and calculating priorities to decide whether a respective router device of the router devices belonging to the common sub-network is to have an operational status in which the respective router device is placed in operation such that the calculated priority for each of the remaining router devices belonging to the common sub-network is based on a weighting of at least line status information and a remaining battery capacity associated with a respective remaining router device, the router status information including at least the line status information indicating a status of a respective physical link of the external networks to the respective router device so that the router

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devices belonging to the common sub-network operate as one virtual router device;
and

deciding a first router device belonging to the common sub-network that is
operational and one or more other router devices of the router devices belonging to
the common sub-network to be placed in a standby status, according to the calculated
priorities.